D-4 Triple Track Mainline with Sequential Crossovers (Left-Hand) Layout Illustration - General Description

The D-4 layout, titled “Triple Track Mainline with Sequential Crossovers (Left-Hand Layouts),” features a triple-track mainline interconnected through a sequence of left-hand crossover turnouts. In a “Triple Track Mainline with Sequential Crossovers,” each track has the ability to transition to adjacent tracks in a coordinated sequence, allowing trains to smoothly move from one track to another. The left-hand turnouts provide directional crossover points that facilitate these transitions, maintaining an organized flow along the mainline.

This layout is divided into six blocks for better control and segmentation:

West Side: Blocks 2, 3, and 4

East Side: Blocks 7, 6, and 5

The signaling system includes six signals, categorized as follows:

Two single-headed signals, which offer basic control at specified points in the layout.

Two double-headed signals, providing additional routing options for train movements.

Two triple-headed signals, which allow for comprehensive control and multiple signal aspects, especially useful where trains may need to cross between multiple tracks.

The layout also includes four left-hand turnouts:

SW-B and SW-A form the first sequential crossover, located on the west side, allowing trains to transition across the tracks in a coordinated manner.

SW-D and SW-C make up the second sequential crossover on the east side, continuing the transition capability for efficient movement across the mainline tracks.

This configuration is ideal for rail systems requiring high capacity and flexibility, where trains need to alternate between tracks regularly. The use of left-hand turnouts in sequential crossovers provides a smooth and controlled routing structure, enhancing operational flow across the triple track mainline. The arrangement of blocks, signals, and turnouts enables safe, efficient, and well-regulated train movement, making this layout suitable for busy rail corridors where track transitions are frequent.